

STATE OF GEORGIA
TMDL IMPLEMENTATION PLAN FOR
MINERAL SPRING BRANCH
CHATTAHOOCHEE RIVER BASIN

TOXICITY

Prepared by
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Environmental Protection Division
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TMDL Implementation Plans are platforms for establishing a course of actions to restore the quality of impaired water bodies in a watershed. They are intended as a continuing process that may be revised as new conditions and information warrant. Procedures will be developed to track and evaluate the implementation of the management practices and activities identified in the plans. Once restored, appropriate management practices and activities will be continued to maintain the water bodies.

INTRODUCTION

Georgia Environmental Protection Division (GAEPD) has identified a 3-mile segment of Mineral Springs Branch, from the discharge point of the William L. Bonnell Company Waste Treatment Facility (WTF) to the confluence with Mountain Creek, as partially supporting its designated use due to the parameter toxicity. The water use classification for Mineral Springs Branch is fishing. The fishing classification, as stated in Georgia's Rules and Regulations for Water Quality Control Chapter 391-3-3-.(6)(c), is established to protect the "propagation of Fish, Shellfish, Game and Other Aquatic Life; secondary contact recreation in and on the water; or for any other use requiring water of a lower quality."

Mineral Springs Branch receives wastewater discharged from the City of Newnan's Mineral Spring Branch Water Pollution Control Plant (WPCP) and the William L. Bonnell Waste Treatment Facility. The listing was based on the results of whole effluent toxicity (WET) tests conducted on effluent from the William L. Bonnell Waste Treatment Facility.

PLAN FOR TMDL IMPLEMENTATION

The William L. Bonnell WTF discharges an average of about 0.8 million gallons per day (MGD) of wastewater to Mineral Springs Branch. WET tests conducted by GAEPD on the wastewater from this facility in May 1995 indicated chronic and acute toxicity in the effluent. WET tests conducted on effluent from this facility in May 2002 also indicated chronic and acute toxicity. The City of Newnan's WPCP discharge up to 0.75 MGD to Mineral Springs Branch, but there is no information to indicate that its effluent has ever been tested for toxicity.

Implementation of the waste load allocation for the TMDL will be conducted by GAEPD through the NPDES permitting process. GAEPD will determine through the NPDES permitting process whether these dischargers to Mineral Springs Branch have a reasonable potential of discharging chronically toxic effluent. The results of these reasonable potential analyses will determine the specific type of requirements(s) for each facility's NPDES permit.

MONITORING PLAN

GAEPD NPDES permitting group will use the most current EPA-approved NPDES Reasonable Potential Procedure and Whole Effluent Toxicity Strategy to determine whether Chronic WET monitoring requirements or limitations are necessary. A Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) process may be used by the facilities that discharge to Mineral Springs Branch if there is a need to identify and reduce contaminants in their effluent that cause or contribute to toxicity. EPA provides guidance documents detailing the TIE/TRE process.

REFERENCE

Georgia Rules and Regulations for Water Quality Control, Chapter 391-3-6-.03,
Water Use Classifications and Water Quality Standards,
Revised February 2004.

USEPA, 2003. Chattahoochee River Basin TMDL for Toxicity in Mineral Springs Branch, Coweta County, February 2003.